Observations of Vesta made at the Natal Observatory, Durban.

Communicated by E. Nevill.

The following observations were made by Mr. Rendell by means of a cross-bar micrometer with the equatorial refractor, aperture 8 inches, focal length 10 feet. Magnifying power 50.

Date. 1905.	Greenwich Mean Time.	Apparent Difference. Vesta minus Star. R.A.	N.P.D.	Vesta's Approx. Hour-Angle.	No of Comparisons.	Comparison Star.
	h m s	m s	″	h m		
May 23	3 54 27	+1 30·64	−8 11·3	2 3 E.	7	*a*
,,	5 38 53	+1 32·12	−7 57·8	0 18 E.	4	*a*
,,	6 32 2	+1 32·64	−7 29·3	0 35 W.	4	*a*
24	6 47 21	+1 52·26	−0 41·3	0 54 W.	7	*a*
25	3 54 55	+2 11·01	+5 20·9	1 55 E.	6	*a*
July 4	6 57 47	+3 18·25	−3 53·2	3 13 W.	2	*b*
13	6 51 55	+4 39·32	+1 33·7	3 32 W.	5	*c*

Comparison Stars.

		R.A.	N.P.D.
		h m s	° ′ ″
a.	Lalande 22743 (Paris 14796)	12 0 47·61	79 38 27·2 (1875·0)
b.	,, 23608 (,, 15505)	12 31 42·27	86 1 45·3 ,,
c.	,, 23851 (,, 15726)	12 41 17·62	87 37 51·3 ,,

Notes.

The observations have not been corrected for refraction or parallax.

May 23. The following observations were obtained with the 3-inch transit instrument:—

R.A. of Star *a* = 12 2 21·02
R.A. of Vesta = 12 3 53·07
} Diff. = $1^m\ 32^s{\cdot}05$ (G.M.T. = $5^h\ 57^m\ 10^s$)

July 4. Cloudy, observation doubtful.

Natal Observatory, Durban:
1905 *August* 31.

The Magnitude of η Argûs, 1905. By R. T. A. Innes.

The two comparison stars used are the same as on former occasions (*Monthly Notices*, lix. p. 570), viz. C. G. A. Cluster Catalogue, No. 121, mag. 8·0, colour on Chandler's scale 8, and Gilliss 1332, mag. 7·6, colour 4. The telescope used, a 4-inch refractor, belongs to Mr. R. N. Kotze.

1905 May	20	mag. =	7·8		
„	25	„	7·6		
June	3	„	7·7	colour	7
„	24	„	7·55	„	8
„	25	„	7·7		
1905·5		„	7·67	„	$7\frac{1}{2}$

The change, if any, since 1896 is quite insignificant.

Johannesburg: 1905 *June* 27.

Ephemeris for Physical Observations of the Moon for 1906. By A. C. D. Crommelin.

Greenwich Midnight. 1906.		Selenographical Colong.	Lat. of the Sun.	Geocentric Libration. Sel. Long.	Lat. of the Earth.	Physical Libration. Long.	Lat.	O.
		°	°	°	°	°	°	°
Jan.	1	349·14	+1·04	+4·13	+4·50	+·003	+·025	335·44
	2	1·30	+1·02	+2·93	+5·44	·000		336·55
	3	13·46	+1·00	+1·65	+6·14	−·002		338·59
	4	25·60	+0·98	+0·35	+6·57	−·003		341·52
	5	37·75	+0·96	−0·89	+6·72	−·005		345·23
	6	49·89	+0·93	−2·01	+6·58	−·008		349·66
	7	62·02	+0·91	−2·98	+6·15	−·010		354·68
	8	74·15	+0·88	−3·75	+5·42	−·012		0·09
	9	86·28	+0·86	−4·33	+4·42	−·013		5·63
	10	98·41	+0·82	−4·69	+3·18	−·013		11·01
	11	110·53	+0·80	−4·85	+1·75	−·014		15·85
	12	122·66	+0·77	−4·81	+0·21	−·015		19·85
	13	134·79	+0·75	−4·57	−1·37	−·015	+·025	22·75
	14	146·93	+0·72	−4·15	−2·89	−·015	+·026	24·39
	15	159·07	+0·69	−3·55	−4·26	−·015		24·67
	16	171·22	+0·66	−2·77	−5·40	−·014	+·026	23·59